Applicant

G. Douglas Antuma

Appln. No.

09/483,542

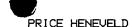
Page

2

REMARKS

In the present Office Action, claims 1-26, all of which remain present in this application, were finally rejected. Applicant has concurrently filed herewith a Request for Continued Examination (RCE) along with a request for a three month extension of time to respond to the present Office Action and, as such, request reconsideration. In the present Office Action, claims 1-26 were rejected under 35 U.S.C. §112, first paragraph, as containing subject matter which was not described in the specification in such a way to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention without undue experimentation; claims 1-26 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,740,341 (hereinafter Oota); claims 1, 10 and 19 were rejected under 35 U.S.C. §102(a) as being anticipated by "Building simulation: state of the art and the role of IBPSA," J. Hensen, University of Strathclyde, IBPSA, September 1999 (hereinafter Hensen); and claims 1, 10 and 19 were also rejected under 35 U.S.C. §102(b) as being anticipated by "OSCONCAD: A Model-Based CAD System with Integrated Computer Applications," F. Marir, Itcon, Vol. 3, July 1998 (hereinafter Marir). For the reasons further set forth below, Applicant respectfully submits that claims 1-26 are allowable over the applied prior art.

With respect to the rejection of claims 1-26 under 35 U.S.C. §112, first paragraph, Applicant notes that there is no requirement that an application whose claimed subject matter may be implemented with a computer program include a copy of the computer program in order for the application to be enabled. More specifically, enablement is determined from the viewpoint of a skilled programmer using the knowledge and skill with which such a person is charged. See Northern Telecom Inc. v. Datapoint Corp., 908 F.2d 931, 15 USPQ2d 1321, 1329 (Fed. Cir. 1990), cert. denied, 498 U.S. 920 (1990), citing In re Sherwood, 613 F.2d 809, 204 USPQ 537 (CCPA 1980). For the Examiner's convenience, a copy of Northern Telecom is transmitted herewith (22 pages). Thus, the fact that Applicant's specification does not include a computer program that implements the invention of claims 1-26 does not mean that the specification is not enabling. In sum, it is Applicant's position that claims 1-26 are



Applicant

G. Douglas Antuma

Appln. No.

09/483,542

Page

3

fully supported by the specification and enable one skilled in the art to make and/or use the invention without undue experimentation. In support of Applicant's position, Applicant has submitted herewith a Declaration under 37 C.F.R. §1.132 of Brian Campau (3 pages), a skilled programmer, attesting to the fact that the Application, as filed, enables one of ordinary skill in the art to practice the invention of claims 1-26, without undue experimentation.

With reference again to Applicant's specification, Fig. 1A shows a representation of a three dimensional building structure volume, i.e., a three dimensional roof truss volume, that is sectioned at multiple points of interest. Applicant's Figs. 1B-1D, depict two dimensional building structure profiles, sectioned from the roof truss volume of Fig. 1A, at various points of interest. These two dimensional building structure profiles allow for the consideration of the positioning of various structural and non-structural components relative to a building structure.

With respect to the rejection of claims 1-26 based on Oota, Applicant notes, in order to anticipate a claim under 35 U.S.C. §102, a reference must teach each and every claimed feature. In sum, the rejection based on Oota should be withdrawn as Applicant's specification clearly enables one of ordinary skill in the art to make and/or use the claimed invention without undue experimentation. Moreover, Applicant again submits that Oota does not teach utilizing a two dimensional building structure profile (sectioned from a representation of a three dimensional building structure volume) to determine where to position various structural and non-structural components with respect to a building structure. While Oota discloses three dimensional component mapping based on a two dimensional logical connection information of plant components and three dimensional arrangement space information, as well as sectioning a building, the sectioning is directed to dividing a building with reference planes such that component arrangement and routing can be performed individually for each section (see col. 15, lns. 52-57). This does not teach, nor does it suggest, utilizing a two dimensional building structure profile, sectioned from a representation of a three dimensional building structure volume, to determine where to position various structural and non-structural components relative to a building structure.

Applicant

G. Douglas Antuma

Appln. No.

09/483,542

Page

4

With respect to the rejection of claims 1, 10 and 19 based upon Hensen, Applicant submits that Hensen does not teach, or suggest, sectioning a three dimensional building structure volume at a point of interest to provide a two dimensional building structure profile that includes a component profile if the three dimensional component extends through the point of interest. More specifically, Hensen is merely directed to designing a building using computerized building energy analysis and equipment sizing software. Thus, while Hensen discloses the use of a computer program to improve energy consumption and comfort levels within a building, Hensen does not teach or suggest volume detailing a building structure to allow for the consideration of the positioning of various structural and non-structural components relative to the building structure. In sum, Hensen is merely directed to the manipulation of building energy use through tradeoffs in building site, orientation, spatial definition, envelope configuration and definition of HVAC, and other building systems, to achieve energy savings.

With respect to the rejection of claims 1, 10 and 19 based upon Marir, Applicant submits that Marir is merely directed to a system (OSCONCAD), which addresses design fragmentation problems in the architecture, engineering and construction (AEC) industry and seeks to provide a vehicle for storing architectural design information in an integrated object oriented database that is shared across a range of computer applications. More specifically, the system seeks to provide common definitions of objects and functions supported by software applications written for dedicated use in the architecture, engineering and construction industries (see Fig. 4). This does not teach, nor does it suggest, utilizing a two dimensional building structure profile, sectioned from a representation of a three dimensional building structure volume, to determine where to position various structural and non-structural components relative to a building structure.

Applicant respectfully submits that this reply is fully responsive to the above-referenced Office Action.

P.06



Applicant

G. Douglas Antuma

Appln. No.

09/483,542

Page

5

CONCLUSION

For all of the foregoing reasons, Applicant respectfully submits that claims 1-26 are allowable. Applicant respectfully request the Examiner contact the undersigned at 616-949-9610, prior to the issuance of another Office Action for this case.

Respectfully submitted,

G. DOUGLAS ANTUMA

By: PRICE, HENEVELD, COOPER, DEWITT & LITTON

03-05-04 Date

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